Problems 1.8–22 and 1.9–12. These are routine problems which are to be solved by hand (no computer solutions accepted). You may use any technique you wish. Since the problems are routine, your solutions don’t need to be overly verbose.

Problem 1.9–24. I suggest you proceed as follows.

- Start by saying, “Let $S(t)$ be the amount of salt in pounds in the tank at time $t$ in minutes.”
- Set up an initial-value problem (a differential equation and an initial condition) for $S(t)$.
- Solve the initial-value problem for $S(t)$.
- Answer the question in the statement of the problem.